

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

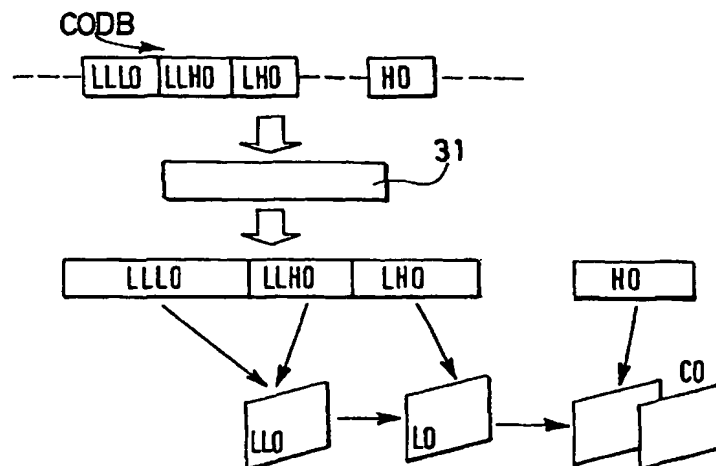


(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/004355 A1

- (51) International Patent Classification⁷: **H04N 7/26**
- (21) International Application Number:
PCT/IB2003/002779
- (22) International Filing Date: 18 June 2003 (18.06.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
02291621.7 28 June 2002 (28.06.2002) EP
- (71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BOURGE, Arnaud** [FR/FR]; 156 Boulevard Haussmann, F-75008 Paris (FR). **BARRAU, Eric** [FR/FR]; 156 Boulevard Haussmann, F-75008 Paris (FR). **BENETIERE, Marion** [FR/FR]; 156 Boulevard Haussmann, F-75008 Paris (FR).
- (54) Title: **SUBBAND VIDEO DECODING METHOD AND DEVICE**
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



(57) **Abstract:** The invention relates to a video decoding method for the decompression of an input coded bitstream corresponding to an original video sequence. The sequence has been divided into successive groups of frames (GOFs) and coded by means of a three-dimensional subband video coding method. According to the invention, the decoding method is iterative and comprises as many iterations as the number of couples of frames in each GOF, each iteration itself including, for the reconstruction of each successive couple of frames of each GOF, the sub-steps of decoding the coded bitstream that corresponds to the current GOF, storing, from the decoded bitstream thus obtained, only the data related to the current couple of frames and appropriate subbands containing some information on at least one frame of said current couple of frames, and, from said related data and said appropriate subbands, synthesizing the two frames of said current couple of frames.